## Journal of Diabetes Science and Technology

Volume 3, Issue 6, November 2009 © Diabetes Technology Society



## Blood Glucose Control in the Trauma Patient

James Eakins, M.D.

## **Abstract**

Hyperglycemia can be a significant problem in the trauma population and has been shown to be associated with increased morbidity and mortality. Hyperglycemia in the trauma patient, as in other critically ill patients, is caused by a hypermetabolic response to stress and seems to be an entity of its own rather than simply a marker. Although several early studies in a mixed intensive care unit population indicated that insulin protocols aimed at strict glucose control improved outcome, later studies did not support this and, in fact, encountered increased complications due to hypoglycemia. More recent studies in the trauma population, while supporting the correlation between hyperglycemia and increased mortality, seemed to indicate that protocols aimed at moderate glucose control improved outcome while limiting the incidence of hypoglycemic complications.

J Diabetes Sci Technol 2009;3(6):1373-1376

Author Affiliation: Department of Surgery, Cooper University Hospital, The Robert Wood Johnson Medical School–University of Medicine and Dentistry, New Jersey, Camden, New Jersey

Abbreviations: (GCS) Glasgow Coma Scale, (ICU) intensive care unit, (TBSA) total body surface area

Keywords: burn, hyperglycemia, insulin, trauma

Corresponding Author: James Eakins, MD, Assistant Professor of Surgery, The Robert Wood Johnson Medical School–UMDNJ, Department of Surgery, Cooper University Hospital, One Cooper Plaza, Camden, NJ 08103; email address <a href="mailto:james.eakins@tenethealth.com">james.eakins@tenethealth.com</a>